

Contact: Diana Gonzalez

**RESEARCH FACULTY PRESENTATION AT IOWA STATE UNIVERSITY:
“BIOBASED CHEMICALS THROUGH ADVANCED BIOMANUFACTURING”**

Action Requested: Receive the presentation.

Executive Summary: Professor Brent Shanks will make a presentation on biobased chemicals through advanced manufacturing. An important emerging technology area for both Iowa and the United States is the use of advanced biomanufacturing to produce biobased chemicals that can be used to replace fossil carbon-derived chemicals. Professor Shanks will discuss this opportunity, as well as ISU's collaborative research approach for developing biobased chemical technology.

Professor Shanks has a unique combination of scientific and management skills. He led ISU's efforts to establish the National Science Foundation (NSF) Engineering Research Center in Biorenewable Chemicals in 2008. The Center now has more than 20 affiliated researchers, including members of the National Academy of Engineering (NAE), from six partner universities. Dr. Shanks joined ISU in 1999 after a successful 12-year career at the Shell Chemical Company bringing with him an excellent industrial, practical perspective to his research and teaching. He has published approximately 100 refereed papers, most within the past 15 years while an ISU faculty member. He has delivered 90 invited presentations around the world. Dr. Shanks has supervised 25 graduate students, including 17 Ph.D. students who have completed their degrees. Dr. Shanks has brought more than \$40 million of extramural funding to ISU. He is widely considered to be “the” leader in the world of researchers working at the interface between biological processing and chemical catalysis. He not only provides key leadership in the broad area of bio-renewables, but he is also conducting key research to design, synthesize, and explain the performance of new heterogeneous catalysis for the conversion of biomass-derived feedstocks. Dr. Shanks is an excellent colleague on campus and has demonstrated outstanding performance in his service and teaching at ISU.